

Docket No. 511.40998X00  
Appln. No. 10/018,188  
December 15, 2005

**AMENDMENTS TO THE CLAIMS:**

The following listing of claims replaces all prior listings, and all prior versions, of claims in the application.

**LISTING OF CLAIMS:**

1. (Currently amended) A CMP abrasive consisting essentially of~~comprising~~ cerium oxide particles, a dispersant, water, and, additionally, an organic polymer having an atom or a structure capable of forming a hydrogen bond with a hydroxyl group present on a surface of a film to be polished.
2. (Original) The CMP abrasive according to Claim 1, wherein the organic polymer is a compound containing at least one atom having an unpaired electron in a molecular structure.
3. (Previously presented) The CMP abrasive according to Claim 1, wherein said organic polymer is a compound containing either one or both of a nitrogen atom and an oxygen atom in a molecular structure.
4. (Previously presented) The CMP abrasive according to Claim 1, wherein said organic polymer is a compound having an adsorption ratio of 50% or more with respect to silicon oxide particles of a specific surface area of 50 m<sup>2</sup>/g dispersed in water of pH 6 to 8.
5. (Previously presented) The CMP abrasive according to Claim 1, wherein said organic polymer is a compound having an adsorption ratio of 40% or

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more with respect to silicon nitride particles of a specific surface area of  $3.3 \text{ m}^2/\text{g}$  dispersed in water of pH 6 to 8.

6. (Previously presented) The CMP abrasive according to Claim 1, wherein the sedimentation speed of cerium oxide particles is  $20 \text{ }\mu\text{m/s}$  or less.

7. (Previously presented) The CMP abrasive according to Claim 1, wherein said organic polymer is polyvinyl pyrrolidone.

8. (Original) The CMP abrasive according to Claim 7, herein said polyvinyl pyrrolidone has a weight average molecular weight of 5,000 to 2,000,000.

9. (Original) The CMP abrasive according to Claim 1, which comprises 0.01 to 2.0 parts by weight of dispersant and 0.001 and 1,000 parts by weight of an organic polymer based on the cerium oxide particle of 100 parts by weight, and the rest comprising water, the concentration of the cerium oxide particles in the abrasive being 0.5 to 20% by weight.

10. (Withdrawn) A method for polishing a substrate comprising polishing by moving a substrate on which a film to be polished is formed and a polishing platen while pressing the substrate against the polishing platen and a polishing cloth and supplying said CMP abrasive according to Claim 1, between the film to be polished and the polishing cloth.

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11. (Withdrawn) A method for manufacturing a semiconductor device comprising a step of polishing a film to be polished by moving a substrate on which the film to be polished is formed and a polishing platen while pressing the substrate against the polishing platen and a polishing cloth and supplying said CMP abrasive according to Claim 1, between the film to be polished and the polishing cloth.

12. (Currently Amended) An additive for a CMP abrasive consisting essentially of comprising an organic polymer having an atom or a structure capable of forming a hydrogen bond with a hydroxyl group present on a surface of a film to be polished, and water.

13. (Previously presented) The CMP abrasive according to Claim 1, wherein said organic polymer is included in an amount in the range of 0.01 to 100 parts by weight based on 100 parts by weight of the cerium oxide particles.

14. (Previously presented) The CMP abrasive according to Claim 13, wherein the amount of organic polymer is 1 to 50 parts by weight based on 100 parts by weight of the cerium oxide particles.

15. (Previously presented) The CMP abrasive according to Claim 1, wherein the organic polymer has a weight average molecular weight in the range of 5,000 to 2,000,000.

16. (Previously presented) The CMP abrasive according to Claim 1, wherein the film to be polished is an inorganic insulating film.

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17. (Previously presented) The CMP abrasive according to Claim 16, wherein the inorganic insulating film is at least one of a silicon oxide film and a silicon nitride film.

18. (Withdrawn) The method according to Claim 10, wherein the film to be polished is an inorganic insulating film.

19. (Withdrawn) The method according to Claim 18, wherein the inorganic insulating film is at least one of a silicon oxide film and a silicon nitride film.

20. (Previously presented) The additive according to Claim 12, wherein the film to be polished is an inorganic insulating film.

21. (Previously presented) The additive according to Claim 20, wherein the inorganic insulating film is at least one of a silicon oxide film and a silicon nitride film.

22. (Previously presented) The additive for a CMP abrasive according to Claim 12, wherein said organic polymer is in addition to a dispersant included in said CMP abrasive.

23. (New) A CMP abrasive comprising cerium oxide particles, a dispersant, water, and, additionally, an organic polymer having an atom or a structure capable of forming a hydrogen bond with a hydroxyl group present on a

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surface of a film to be polished, provided that a composition which is an aqueous slurry useful for the chemical-mechanical polishing of substrates which contain a metal and an insulator, comprising: water, submicron abrasive particles, an oxidant, and an organic polymer which attenuates removal of an oxide film, said organic polymer having a degree of polymerization of at least 3 and having a plurality of moieties having affinity to surface groups contained on silicon dioxide surfaces, is excluded.

24. (New) An additive for a CMP abrasive comprising an organic polymer having an atom or a structure capable of forming a hydrogen bond with a hydroxyl group present on a surface of a film to be polished, and water, provided that a composition which is an aqueous slurry useful for the chemical-mechanical polishing of substrates which contain a metal and an insulator, comprising: water, submicron abrasive particles, an oxidant, and an organic polymer which attenuates removal of an oxide film, said organic polymer having a degree of polymerization of at least 3 and having a plurality of moieties having affinity to surface groups contained on silicon dioxide surfaces, is excluded.

25. (New) A CMP abrasive comprising cerium oxide particles, a dispersant, water, and, additionally, an organic polymer having an atom or structure capable of forming a hydrogen bond with a hydroxyl group present on a surface of a film to be polished, provided that a metal film is excluded from the film to be polished.

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26. (New) An additive for a CMP abrasive comprising an organic polymer having an atom or a structure capable of forming a hydrogen bond with a hydroxyl group present on a surface of a film to be polished, and water, provided that a metal film is excluded from the film to be polished.